

Mr. Lee rebutted SWBT's contention that prescribed lives have not resulted in economic depreciation. He pointed to LEC market-to-book ratios and purchase premiums as evidence that LEC plant is not underdepreciated. Additionally, the replacement cost of SWBT-Oklahoma's loop plant is significantly greater than its depreciated net book value.

Finally, the "benchmarks" used by SWBT to support its lives are not relevant. Comparisons to 1994 AT&T lives are irrelevant because AT&T had no local loop or end office switching equipment in 1994. Comparisons to the financial book lives of other companies are likewise irrelevant, since financial book lives are biased on the short side, as explained above.

At the conclusion of his direct testimony, Mr. Lee explained that the use of unrealistically short depreciation lives in LRIC calculations would be anti-competitive, discriminatory and, in fact, unlawful.

In his rebuttal testimony, Mr. Lee responded to the recommendations of Robert L. Stright, Executive Vice President of The Liberty Consulting Group, for the depreciation lives to be used in Long-run Incremental Cost ("LRIC") calculations.

Mr. Stright correctly concludes that:

The proper depreciation lives to be used for calculating unbundled network element prices are those prescribed by the FCC in SWBT's most recent depreciation review.¹¹

Despite this conclusion, Mr. Stright arbitrarily recommends different lives for four accounts. He recommends much shorter lives for three of these accounts. As Mr. Lee explained in his direct testimony, unrealistically short lives would result in prices above LRIC.¹² Such prices would impede the development of competition based upon the purchase of unbundled network elements. They would also require ratepayers to make unlawful capital contributions to SWBT.¹³

Finally, Mr. Lee reviewed the portion of the rates contained in the proposed settlement between SWBT, Cox and Staff relating to Depreciation. The proposed settlement rates do not represent cost based rates which satisfy either the Oklahoma costing rules (OAC 165:55-17-25 and OAC 165:55-17-27) or the relevant provisions of the Telecommunications Act of 1996. The proposed settlement rates do not incorporate all of the changes which are necessary in order to render SWBT's cost studies compliant with the Act and the Oklahoma costing rules as outlined in Mr. Lee's testimony. Indeed, the proposed settlement

¹¹ Stright Direct, Cause No. PUD 970000213 ("Cause 213"), p. 34; Cause No. PUD 970000442 ("Cause 442"), 26.

¹² Lee Direct, p. 24.

¹³ Id., p. 25.

rates do not even incorporate or represent the changes and recommendations of Staff consultants and, therefore, cannot be cost-based even based upon the recommendations of Staff's own consultant. The Commission should not adopt these rates.

D. Evidence and Testimony of Chickasaw, Dobson and Pioneer

Kent Larsen

Mr. Larsen's testimony addressed problems with SWBT's Unbundled Network Element (UNE) pricing and the Long Run Incremental Cost (LRIC) methods used to develop the per-unit cost to deploy a forward-looking network. In order for SWBT's forward-looking LRIC studies to provide valid results, SWBT should be required to forecast forward-looking demand consistent with LRIC study principles. SWBT has misapplied demand units to its calculated costs; double counted certain costs, such as Premium Time-Labor; has inflated the costs of many UNE prices; incorrectly developed certain factors inflating the costs of many UNE prices, including the Common Cost Fixed Allocator applied to all elements and the Building Factor applied to Central Office Electronic elements. Mr. Larsen testified that he believes the threat of windfall profits is almost a certainty if SWBT's demand assumptions and the resulting prices are allowed to stand. SWBT is entitled to recover all of its costs, defined to include a reasonable profit and a contribution to its common costs. Yet, if SWBT's pricing methods are allowed to stand, SWBT stands to recover almost three times its costs based on SWBT's own demand assumptions. LRIC demands a recognition of long run costs and demand and the fact that, over the long run, lumpy, fixed costs associated with large plant deployments are assumed away as variable and avoidable. LRIC also requires SWBT to recognize that the efficient deployment of a competitive network does not contemplate deploying twice as much spare capacity as that which is used today. Combined, these two features of LRIC require SWBT to revise its demand assumptions upward by a substantial margin and reprice its UNES accordingly. If a rated fill factor for a network element was assumed to be 85%, then a pure application of LRIC principles requires SWBT to calculate demand to equal 100% of the capacity in place, or its rated fill of 85% of the capacity deployed. SWBT is calculating the Common Cost Fixed Allocator on one basis and then (over)applying it on a different basis, yielding an over-recovery of these costs. Proper application of the factor to only the expense portion upon which it was based yields an accurate forecast of the common costs in the ACES program. Mr. Larsen recommended that SWBT be prohibited from charging a premium rate in its interconnection agreement. It is Mr. Larsen's opinion that booked building costs are high in comparison to other large LEC study areas and therefore unsuitable as a starting point, that SWBT has not properly satisfied its burden of proof supporting its 2.57 composite CC to BC ratio for buildings and that there are additional computational errors, all of which combine to overstate SWBT's building costs.

The Commission should require SWBT to support its inclusion of excessive book cost as an efficient starting point to project forward-looking costs or adjust the starting point to a more reasonable amount. Mr. Larsen recommended that SWBT should adjust its building replacement costs to reflect that a forward-looking, efficient deployment of modern, digital switches would assume a smaller, properly sized building. Mr. Larsen recommended that the Commission require SWBT

to demonstrate similar rigor defending its assumptions regarding its building costs or should require SWBT to utilize 19.7%, the weighted average of building costs to switching as shown on Attachment 1 and cited in my prefiled testimony.

The corrections recommended in his prefiled testimony should reduce building cost to a more reasonable level and thus reduce SWBT's UNE prices. Mr. Larsen recommended that the Commission require SWBT to recalculate its Buildings factor and all resulting UNE elements which include the Building factor as a component of their cost.

Mr. Larsen recommended that the Commission not approve SWBT's LRIC cost studies unless the problems raised in his prefiled testimony and the problems identified by AT&T's testimony and analysis are remedied.

E. Evidence and Testimony of The Liberty Consulting Group

1. Robert L. Stright

Mr. Stright is an officer and owner of The Liberty Consulting Group (Liberty). The Staff of the Oklahoma Corporation Commission hired Liberty to assist in the review of testimony and cost studies supporting proposed permanent prices for the unbundled network elements of Southwestern Bell Telephone Company (SWBT). Mr. Stright's testimony summarizes the results of Staff's review of the cost studies that SWBT and AT&T presented in support of their proposed prices in this proceeding. The testimony lists and supports those areas where adjustments should be made to make the results of SWBT's cost studies more appropriate for use as a basis for establishing those prices.

Mr. Stright's testimony in PUD 97-213 provided a summary of (1) Liberty's qualifications to perform the review of cost studies, (2) the process Staff used to review the cost studies, (3) the relationship among the three Staff witnesses, and (4) the network elements that are to be priced in this proceeding. The focus of his testimony was on (1) the common aspects of the cost studies, and (2) the pricing of unbundled loops.

Many of the cost studies used to support price proposals used some of the same general inputs, factors, and methods. In general, these common inputs and factors applied to elements that had a capital investment and for which there were recurring prices. These common aspects included: (1) the use of a cost of capital to determine part of the monthly expense associated with capital investments and to perform present value analyses, (2) the use of economic lives of various equipment categories to determine the depreciation expense for various investments, (3) the use of the CapCost model to determine the recurring costs associated with capital investment, (4) various factors used in either the CapCost or ACES model, and (5) the application of a common overhead factor to calculated costs to determine proposed prices.

With regard to the economic lives used to determine the period over which depreciation of capital assets will be recovered, Staff believed that, in general, the lives prescribed by the FCC should be used in the pricing on unbundled network elements. SWBT proposed economic lives that, in the areas of

electronics and outside plant, were much shorter than those used by the FCC. Staff believed there are reasons that lives could be shorter in the first of these areas but not the second.

Staff found that the parties did not use the CapCost model appropriately to determine the rate at which depreciation will be recovered. More specifically, the way the parties ran the model added new investment each year even before the end of the economic life of the asset. Staff recommended that the CapCost model use a rectangular survivor curve, which will ensure that the correct amount of depreciation is recovered.

Staff recommended changes to factors used in the cost studies. For example, Staff recommended that the inflation factor should not be used since there was no accounting for an offset to inflation from productivity gains. Also, Staff calculated a building factor that was lower than that proposed by the other parties. The way the other parties calculated the building factor would have the current number and size of SWBT's buildings reproduced, which is not a forward looking assumption.

Finally, Staff calculated a common cost factor that was different than those used by the other parties. Since the common cost factor is applied to costs that include a return on investment and income taxes, it is more appropriate to use revenues as a basis for the factor as opposed to the expenses basis that SWBT used.

With regard to the loop cost studies, Staff recommended changes in three areas. First, Staff calculated forward-looking fill factors for the copper distribution and feeder portions of the network. Fill factors are used to determine the amount of spare capacity that should be included in the price of unbundled loops. SWBT used current fill factors which had evolved over the years as opposed to factors that could be considered the most efficient and forward looking.

Second, Staff recommended that a correction to the loop cost studies should be made because actual loop lengths were not used in the loop cost model. SWBT's model used length band midpoints and this had the potential to cause a small error in the calculated loop cost. Finally, Staff recommended a correction factor be applied to the costs of 4-wire loops because those loops tend to be used in business applications, and businesses may have, on average, shorter loop lengths than residential 2-wire loops.

Mr. Stright's testimony in PUD 97-442 provides a summary of (1) Liberty's qualifications to perform the review of cost studies, (2) the process Staff used to review the cost studies, and (3) the items that are to be priced in this proceeding. SWBT and AT&T sought a determination of prices for: compensation for delivery of traffic, directory order and delivery, a variety of items relates to 911, directory listing information, customer change charges, operator service and directory assistance branding, operator service and directory assistance service rate information, operations support systems access, interim number portability, and operator service and directory facilities.

Some of the proposed rates and some of the inputs and assumptions used in the cost studies for this proceeding were identical to unbundled network elements whose prices will be determined in PUD 97-213. Therefore, Mr. Stright repeated some of his testimony from that Cause in this proceeding. Moreover, Mr. Stright attached the testimony of Thomas M. Krafcik and Paul P. Hlavac from PUD 97-213.

For most of the items to be priced in this Cause, SWBT determined its proposed prices on the basis of costs. However, for a few items, SWBT used what it called market-based pricing. Staff does not agree with this method of pricing. The parties call the items that are to be priced in this case "services and functions necessary for interconnection." The relief that the parties jointly seek in their application appears to identify these items as something other than unbundled network elements. Nevertheless, many of these items have the characteristics of unbundled network elements. It would be consistent with the Telecommunications Act of 1996 ("the Act") to include them as unbundled network elements and it is difficult to distinguish the services that are at issue from unbundled network elements. However, even if the items are not unbundled network elements, the way that the parties have treated them means that the same pricing standard should apply to them under the Act. Section 252(d)(1) of the Act imposes a cost-based pricing standard on both interconnection and unbundled network elements. The parties' joint application called the items of this case services and functions necessary for interconnection. Section 252(d)(1), which the parties also cite as conferring on this commission the jurisdiction to decide their joint application, makes no distinction in the pricing basis that applies to interconnection and to unbundled network elements. Therefore, the pricing standards that were used in PUD 97-213 for network elements are equally applicable in PUD 97-442. The parties agreed in PUD 97-442, as did the Staff, that long-run forward-looking costs should serve as the basis for pricing. So should those costs serve here to guide the Commission's determinations of the prices for the items at issue here.

With regard to the specific pricing in this proceeding, Staff calculated prices or requested that models be run with changed inputs and assumptions to determine new prices. For the item concerning provision of directory assistance listings, Staff recommended that either a completely new cost study be undertaken that would better reflect SWBT's investment in the directory assistance database, or that a specific rate, calculated using AT&T's method, be adopted. For the service related to non-published number messaging service, Staff recommended a price of \$0.00, because it is a reciprocal rate and there is not likely to be much of an imbalance in the parties' billings. Staff concluded that there was no need to determine a price for interim number portability.

2. Paul P. Hlavac

Dr. Paul P. Hlavac is a consultant with The Liberty Consulting Group. His testimony summarized Staff's conclusions regarding costs and prices for unbundled network elements related to local switching, ports, and tandem switching; dedicated transport; common transport; Signaling System 7 (SS7); Operations Support Systems (OSS); and most of the elements for which SWBT has proposed pricing on an Individual Case Basis (ICB). These ICB elements included some types of dedicated transport, customized routing, call blocking/screening, Advanced Intelligent Network (AIN), performance data, and dark fiber.

With regard to switching, Staff recommended changes to the cost studies related to the discount from the vendor list price that should be used in the cost model. Staff recommended that the discount be increased to reflect prices that will be forward-looking. Staff also thought the discount should consider the minimized cost over the life-cycle of the switch.

With regard to dedicated transport, Staff recommended changes, such as those related to the fill factors, so that the cost studies would reflect forward-looking costs. Utilization was also an issue in the cost studies related to signaling elements.

SWBT proposed "individual case basis" pricing for some elements. Some types of elements or activities are so variable in nature that it is not reasonable to develop meaningful prices through a cost study approach. In some cases, the facilities or activities involved are complex or do not follow routine patterns or sequences. In other cases, they are provided or performed so infrequently that it is impracticable to price them through cost studies. In any case, the unique aspects of providing a certain element or of performing a certain activity need to be considered in determining an appropriate cost.

For some elements, such as the provision of performance data, Staff agreed that ICB pricing was appropriate. For others, such as dark fiber, Staff recommended that cost studies be performed and prices determined.

3. Thomas M. Krafcik

Mr. Thomas M. Krafcik is a consultant with The Liberty Consulting Group. His testimony summarized the results of Staff's review of non-recurring cost studies that SWBT submitted in support of its proposed prices in this proceeding. His testimony also addressed costs associated with: Line Information Data Base Validation, Calling Name Delivery Service, Toll Free Database, Operator Services Call Completion Services, Call Branding, and Service Rate Information.

Staff had several concerns that affected the costs of various non-recurring elements. These concerns dealt with: (1) the support asset loading factor that SWBT uses to develop labor rates; (2) SWBT's inclusion of incentive payments in its calculation of labor rates; and (3) SWBT's activity-time estimates. In addition, for particular studies, Staff had concerns about (1) SWBT's assumptions regarding forward-looking technology and processes; (2) SWBT's computer and procurement costs; and (3) SWBT's proposed disconnect charge.

With regard to the support asset loading factor, Staff's recommended changes were made to ensure that certain costs were not included twice in various aspects of SWBT's cost studies. One of the more significant concerns with the non-recurring cost studies dealt with the time estimates provided for various activities required to provide network elements to the CLECs. Neither AT&T nor SWBT provided solid support for their time estimates. Staff provided recommendations that used the estimates of both parties.

There were several non-recurring cost studies for which SWBT did not use forward-looking technologies and methods. For example, SWBT did not assume the

complete mechanization of service orders. Staff recommended changes to the inputs and assumptions used in the cost studies to correct for this aspect.

Staff recommended numerous changes to the large number of non-recurring cost studies. In general, these changes were made to prevent double counting, to provide for a separate disconnect charge, and to make the studies reflect efficient, forward-looking costs.

III. Findings of Fact and Conclusions of Law

A. Introduction

On June 12, 1998, the ALJ issued his oral recommendation in Cause Nos. 97-213 and 97-442 ("the cost docket"). After considering all of the evidence presented in the docket, including the testimony of Liberty Consulting ("Liberty"), the ALJ recommended approval of the stipulation in PUD 97-213 ("the stipulation") reached between the Staff and Cox, and which SWBT agreed not to oppose if adopted *in toto* (See Tr., June 12, 1998) and the stipulation proposed by Staff in PUD 97-442 which SWBT agreed not to oppose if adopted *in toto*.¹⁴

The ALJ concluded that the stipulated rates are based upon an analysis of the costs presented by the parties in this proceeding and are thus, cost-based and clearly supported by the evidence. In so finding, the ALJ noted that the performance of cost studies is not an exact science, but instead is a process which requires substantial adjustments and estimations. He also found that Cox's testimony should be given more credence than that of AT&T with respect to the rates to be adopted in this docket since Cox is a facility-based provider that has already entered the market, is currently in business in Oklahoma, has collocated with SWBT in Oklahoma and is currently passing orders. Conversely, AT&T is not currently in business in Oklahoma and recently indicated in Cause No. PUD 97-560 that it would not enter the market in Oklahoma at any time in the near future, if ever. Based upon Cox's testimony, the ALJ concluded that Cox, and any other facilities-based competitive local exchange company, could enter the marketplace and become a competitor in Oklahoma with the rates proposed in the stipulation. *Id.*

The ALJ further concluded that even if considered, the appropriateness of which is discussed below, Liberty's testimony supports the reasonableness of the stipulation. The ALJ found that this entire docket has evolved through various stipulations, including a stipulation under which the parties agreed to use SWBT's cost models, a non-unanimous stipulation reached between SWBT and AT&T (and which Staff agreed not to oppose) regarding the acceptance of a 10 percent weighted average cost of capital and finally, the stipulation reached between Cox and Staff regarding the rates for certain SWBT unbundled network elements and services. The ALJ concluded that Liberty's testimony supports the stipulation reached by virtue of the fact that in some areas, Liberty elected to simply

¹⁴ Most of the discussion regarding the "stipulation" herein pertains to the PUD 97-213 stipulation. However, many of the findings of the ALJ regarding the PUD 97-213 stipulation apply with equal force to the PUD 97-442 stipulation.

average the difference between the AT&T and SWBT positions or accept one rate over the other as being more reasonable if the rate fell closer to the range anticipated by Liberty. Following is a more detailed explanation of the ALJ's recommendation with respect to the evidence presented in this docket which clearly supports his position that the stipulated rates in both PUD 97-213 and 97-442 should be adopted in toto by this Commission. *Id.*

B. Liberty Testimony

On April 14, 1998, in Order No. 422255, the Commission directed the ALJ to reopen the record for the submission of testimony and exhibits that had been prefiled by Liberty, but which had not been offered into evidence by Staff during Staff's portion of the case (because Staff had signed and announced support of the stipulation). Thereafter, at a prehearing conference on April 28, 1998, which was continued to May 4, 1998, the parties each agreed to waive their right to cross-examine Liberty Consulting's witnesses and for Liberty Consulting's testimony to be entered into the record pursuant to Order No. 422255, thereby eliminating the need for Liberty Consulting's witnesses to appear live at the hearing. The parties further agreed to revisions and additions to the procedural schedule for the limited purpose of addressing any specific issues raised by the admission of Liberty's testimony into the record. (See Order Revising Procedural Schedule, Order No. 423165, entered on May 15, 1998). Pursuant to the revised procedural schedule, the parties were permitted to file briefs and affidavits regarding the impact, if any, of Liberty's testimony on the outcome of this docket. AT&T, Cox and SWBT submitted briefs regarding the impact of such testimony. After review of the briefs and affidavits in support thereof, the ALJ finds that as a matter of evidentiary law, Liberty's testimony was not properly placed in the record for the following reasons.

First, at the hearing on the merits, Staff announced that it had proposed and signed a nonunanimous stipulation and consistent with such stipulation, it was exercising its right not to introduce Liberty's prefiled testimony into the record. Subsequently in the hearing, Staff counsel announced that he was asked by his client to move for the introduction of that testimony after all, but the motion was rejected by the ALJ because the Staff had already announced its decision to waive its opportunity to present testimony and evidence. The hearings concluded and the ALJ notified the parties by telephone that he was recommending approval of the Cox/Staff stipulation and directed the parties to prepare a draft written recommendation. As that was being prepared, during deliberations, the Commission voted to require the introduction of the Liberty prefiled testimony into the record.

Liberty was retained by and worked for the Staff, but Staff elected instead to develop and propose the rates set forth in the stipulation and to sign such in full support of it.

For these reasons, the ALJ concludes that the introduction of the Liberty testimony into the record has no impact on this proceeding. However, even assuming *arguendo*, that it does have an impact, its impact is that it clearly supports the stipulation reached between Staff and Cox, as discussed *infra*.

C. Cost Based Rates

There has been considerable testimony concerning cost-based rates and whether the various cost proposals satisfy the Commission cost standard for long run incremental costs ("LRIC"). (See OAC Rule 165:55-17-25). The term "cost-based" arises from the requirements of Section 252 of the Telecommunications Act of 1996 ("the Act"), which is a pricing rule for UNEs. Specifically, Section 252 obligates the Commission to determine "just and reasonable rates" that are based on cost, are nondiscriminatory and which may include a reasonable profit. With the stipulation, the same issues are raised again: do the stipulation rates satisfy the cost-based rules? The ALJ concludes that any price structure which uses cost information as the basic structure, as the Staff's proposed stipulation has done, is "based on cost," though many such price structures will not be "equal to" cost.

A number of parties presented cost testimony and rates which each asserts satisfies the Commission long run cost standard. (See, e.g., Testimony of Barry Moore for SWBT, L. Segura for AT&T, Dr. Collins for Cox and others.) The range of costs results was considerable. (See Moore's Schedule 6, p. 4 and compare with Turner's SET-3, p. 4, or see Smith's Schedules 2, 3, 4 and 5 and compare with Petzinger's CEP-2.) The fact that must be kept in mind, however, is that the Commission's ultimate obligation is to determine "just and reasonable rates." This standard is well known to the Commission and has traditionally been the rate standard for utility rates.

The term "based on cost," on the other hand, is nowhere defined in the statutes, the Commission's rules or by the parties. In its most natural meaning, "based on" merely designates something upon which another thing is built upon or supported; it is a starting point, not an end in itself. It need not, and does not, mean that rates must equal any particular cost and indeed the use of the terminology "just and reasonable" would be superfluous if rates were merely to equal costs. The terms "just and reasonable" are well known and understood in Commission rate making terms and historically have been applied, often and usually with a basic foundation on cost, at rate levels that sometimes deviate above and below cost when the "just and reasonable" objectives are taken into account. Several witnesses have agreed, of course, that rates may indeed deviate from a strict "rate equals cost" criteria. (See, e.g., Tr., March 12, 1998, pp. 128-129 (Klick).) The ALJ would note that in making his findings, he gave some consideration to the Affidavit of Charles H. Cleek, which showed that had SWBT's cost studies been adjusted for reasons suggested by AT&T (e.g., relating to fill, depreciation, the cost of money, the common cost allocator, time adjustments, utilization, etc.), then the rates proposed by SWBT would have been reasonably close to the stipulated rates.

Furthermore, the use of the "reasonable profit" term, as part of the rate objective, also reinforces that the "just and reasonable" rate need not be equal to any specific cost results in all cases.

The stipulation reached between Cox and Staff in PUD 97-213 and the stipulation proposed by Staff in PUD 97-442 present certain rate levels that do not strictly equal any cost proposal of any party but which, in total, fall well within the ranges of the various proposals; at times below what SWBT might have

proposed yet above what AT&T might have proposed. (See and compare stipulation with, e.g., Moore's Schedule 2 and Zubkus' JAZ-1.) In cross-examination, AT&T suggested that this resulting rate stipulation must fail simply because it does not equal any parties proposal on costs or is not strictly determined by mathematical adjustments to any cost proposal. (See, e.g., Tr., March 11, 1998, p. 14 (Collins); March 9, 1998, pp. 47-49 (Auinbauh), and March 12, 1998, p. 6 (Flappan).) The ALJ disagrees. The quantity and quality of the evidence is amply sufficient to determine that the stipulation rates are based upon costs. Principally, AT&T argues that the only way to assure "based on costs" would be for the stipulation to have made specific adjustments to SWBT cost studies of the type recommended by others in order, it appears, to have a level of exactness to base the cost/rate equation. (See Tr., March 12, 1998, pp. rk 19-20 (Flappan); March 12, 1998, pp. rk 120-121 and 127-128 (Klick); and March 11, 1998, p. lw 261 (Turner).)¹⁵ For this reason, rates may deviate from exact cost equally and still may be said, as is the case here, to be "based on cost."

In addition, the ALJ concludes that AT&T's assertion that the stipulations must fail because it does not equal any party's proposal on costs is without credibility given the fact that AT&T reached a nonunanimous stipulation as to the cost of capital with SWBT based upon the same principle that the Cox/Staff stipulation was premised on. As with nearly all of the rates proposed by Staff in the stipulation, the cost of capital contained in the AT&T/SWBT stipulation falls between what was proposed by SWBT and Cox, yet there is no claim by AT&T that the number agreed to is not cost-based. In fact, in that stipulation, AT&T specifically agreed "that the cost of capital agreed to ... satisfies the costing standards set forth in Section 252 of the federal Telecommunications Act of 1996 and is a forward-looking cost of capital."

The ALJ concludes that the fact that most of the rates in the stipulations fall between the rates proposed by AT&T and SWBT do not render them unlawful. There remains substantial evidence in the record and this in no way invalidates the fact that the stipulated rates are "based on cost." The Commission, similar to the responsibility of a jury in a civil case, has the discretion to adopt a position in the "middle" of that which is proposed by the parties. When a jury elects to award damages "in the middle" of what has been proposed by either side, the jury's decision will not be thrown out by the court simply because of this. See, e.g., *Allen v. City of Tulsa*, 345 P.2d 443, 447 (Okla. 1959). The Commission has no less freedom and has never before restricted itself to such a simplistic approach in rate setting and the ALJ concludes that it should not do so now.

¹⁵ See *In re Valliant Tel. Co.*, 656 P.2d 273, 277 (Okla. 1982), citing *Community Natural Gas Co. v. Corporation Commission*, Okl., 182 Okl. 137, 76 P.2d 393 (1938), in which the Oklahoma Supreme Court noted: "The Corporation Commission is not limited to any particular theory or method in fixing rates and, needless to say, the establishment of a rate is not a matter of exact science or capable of precise mathematical calculation." See also *Turpen v. Oklahoma Corporation Commission*, 769 P.2d 1309, 1334, fns. 72 and 73 (Okla. 1988).

D. LRIC (Recurring Costs)

All parties have proposed LRIC recurring costs that essentially are the result of (1) determining the investment per unit; (2) adding certain operating expenses such as maintenance, etc.; and (3) determining the capital costs by application of a CAPCOST model which accounts for depreciation, cost of capital, and tax. (See Conwell Direct, Ex. 1.) The focus of the hearing was on the inputs which should be applied to this general recurring cost formula in SWBT's models.

Three principal UNEs appear to have garnered most of the attention from the parties: the loop, local switching and transport. The numerous other UNEs are, of course, of importance, but for purposes of this Report, concentration and comment about these UNEs amply illustrates the whole of the UNE presentations. For purposes of the hearings, the parties agreed that SWBT models would be used and that the focus of the proceeding would be on inputs only. (See Flappan Direct, p. 6.) Further, SWBT and AT&T reached a stipulation (which Staff agreed not to oppose) that the cost of money should be 10 percent, a cost within the range proposed by the parties and which, based upon the evidence of each party (e.g., Dr. Avera and Dr. Collins), the Court finds to be a reasonable basis for decision and within a reasonable range. The debate about other inputs was lively and helpful as it bears upon the stipulation. Since the stipulation rates are, on the whole, higher than AT&T's proposal, I will focus upon those AT&T cost proposals initially.

1. Loop

For loop, using the 8db for discussion, AT&T argued that SWBT's model inputs contained numerous errors. Principally, Mr. Zubkus asserted that the loop length was incorrectly chosen, that the cost of the NID was incorrectly calculated, that the FDI was overstated and that SWBT failed to correctly include all forward looking technology such as IDLC, and fill/utilization. (See Tr., March 12, 1998, p. rk 68 (Zubkus).) AT&T's cost proposal was, therefore, considerably less than SWBT, but closer to the stipulation rate. (See and compare stipulation and Flappan Ex. RPF-9.) SWBT responded that the use of actual length has minimal impact, as does the use of the midpoint of the Kf bands. Furthermore, the agreement between the parties was to use the SWBT model which is based upon the Kf process. The evidence of Mr. Moore seems correct in this regard. (See Moore Rebuttal, p. 4.) Further, SWBT noted that the NID input adjustment by Mr. Zubkus (50 percent) was purely hypothetical, as Mr. Zubkus seemed to agree, but that the actual impact would again be marginal. (See Moore Rebuttal, p. 13.) For FDI, AT&T argued that 25 percent of the FDI in Mr. Moore's study was not in place and adjusted the investment downward to reflect current FDI conditions. On the other hand, SWBT asserted that the forward looking considerations should prevail. (See Moore Rebuttal, pp. 9-11.) AT&T's position, in this FDI proposal, has merit. However, Mr. Zubkus seemed to agree that the impact of the adjustment is slight. (See Tr., March 12, 1998, p. rk 87 (Zubkus).)

For Loop IDLC, there was considerable discussion whether AT&T's assumption was correct or excessive. (See and compare Zubkus, Direct, pp. 30-31 with Moore Rebuttal, pp. 13-14 and Deere Direct, pp. 18-20; and see Tr., March 12, 1998, pp. 95-107.) The 100 percent proposal of AT&T vastly exceeded the actual utilization in the network today and thus, had a significant impact on

costs. In Mr. Deere's estimation, it is unlikely from an engineering standpoint that such amount of IDLC will ever be practical and certainly not for UNES. (See Moore Rebuttal, p. 14.) As discussed in the "fill" issue, the high utilization Mr. Zubkus proposed does not represent the network that will be unbundled by SWBT and used in providing of UNES to AT&T as is required by Section 251 of the Act. For that reason, Mr. Zubkus's proposal must not be given significant weight.

"Fill" received considerable discussion. Indeed, it may be the single most influential input to loop investment. It impacts the cost because of its direct affect on investment and the lower the fill percentage, the higher the unit cost of investment. The disagreement is limited, for loop, to distribution cable (AT&T agreeing with SWBT for feeder loop fill). AT&T's fill proposal was roughly 75 percent higher than SWBT's proposal (e.g., 30 percent vs. 50 percent), which was based upon the actual current fill in the network and which SWBT indicated would likely be the forward looking distribution fill. (See Moore Rebuttal, pp. 5-7 and Dr. Lehman Rebuttal, pp. 24-27.) Distribution cable has certain characteristics that result in the lower fill than is experienced in feeder, characteristics such as lumpy investment, the need to anticipate the future without later disruption of property, the movement of population, etc. Mr. Moore, Dr. Lehman and Mr. Deere discussed some of these characteristics. Particularly, Dr. Lehman pointed out the dynamic affect the network has on fill and that, as observed in the long distance market, competition is not likely to result in greater fill utilization. (See Lehman Rebuttal, pp. 26-28.) Dr. Lehman also noted that it is not consistent with long run theory that new technology be "immediately" input to network, particularly if the cost to gain that efficiency is not included as well. (See Lehman Rebuttal, pp. 4-5.) Thus, merely because AT&T may suggest that some new technology (e.g., IDLC) might be more "forward looking" does not translate *ipso facto* to inclusion. Mr. Zubkus, on the other hand, proffered that based upon his experience, he would expect it to grow over time and reach 50 percent, although the factual basis for this is lacking, based only upon his "experience" and opinion. Again, the Act requires SWBT to unbundle its existing network, not some superior quality network. See Section 251 of the Act; *Iowa Utilities Board v. FCC*, 120 F.3rd 753, 812-813 (8th Cir. 1997). A reflection of fill well beyond what is currently available and used by SWBT to provide retail services essentially asks SWBT to provide superior quality facilities to AT&T. For these reasons, the ALJ concludes that AT&T's loop cost proposal is to be given little weight, but not dismissed entirely. It forms the very lowest boundary of cost.

In setting the recurring rates contained in the stipulation, Staff concluded that the appropriate rates for 2-wire unbundled loops should be set at \$13.00 for urban areas, \$15.00 for sub-urban areas and \$35.00 for rural areas. These proposed rates are much closer to the rates AT&T proposed in this docket than the rates which were put forward by SWBT. In fact, the urban loop rate contained in the stipulation is approximately two thirds of the rate SWBT requested. (See Affidavit of Charles Cleek.)

Cox witness Dr. Collins, in support of the stipulation, noted that many parties had proposed cost-based rates and that each expert was prepared to argue (and did) that their input suggestions were reasonable. Specifically, Dr. Collins testified that the input data to the cost studies presented by the various parties are subject to speculation, are forward looking and have been

developed as a result of estimates of time, cost, inflation rates and other subjective estimates. As a consequence, he concluded that a reasonable outcome of the cause could be the rates that are in the stipulation which he considers to be cost-based. (See Tr., March 11, 1998, p. bwm-11 (Collins).) The decision is which of the proposals are "more reasonable" within the wide range provided. (See Tr., March 11, 1998, p. bwm 16 (Collins).) With respect to the loop issue, the ALJ finds that the costs are probably higher than AT&T has proposed for the above reasons. But, based upon other factors in issue, such as depreciation and cost of money, the costs are probably not as high as the costs SWBT proposed. This continual balancing and weighing process runs through all of the various UNE cost proposals. But, as Dr. Collins noted, this does not mean that the rates in the stipulation are not based upon cost; rather that the range of potential costs amply support the stipulation positioning of rates. Moreover, Dr. Collins, on the basis of Cox's cost proposal, found that the stipulation rates for loops were within the range he supported with his own cost adjustments to SWBT results/inputs. (See Tr., March 11, 1998, pp. bwm 20-24 (Collins).) The ALJ gives considerable credence to this testimony, particularly since Cox states that at these rates, it, along with any other facilities-based CLEC in Oklahoma, can fairly compete and enter the market in competition with SWBT. (See Tr., March 11, 1998, Bwm 12 (Collins).) For an abundance of reasons stated above, the stipulation for loops (of all kinds) is therefore supported by costs and for that reason, independently, is just and reasonable.

The above holds true for other loop proposals (e.g., BRI, etc.). The ALJ has read the testimony, sifted through the contentions and reviewed the various cost proposals in the record. Future delineation of each individual disagreement would burden the record unnecessarily (except as discussed with some cost characteristics below). Suffice it to say, it is the ALJ's opinion that all of the cost proposals are within the range of the rate stipulation and therefore the rates are reasonable. Little time is devoted in this opinion to these secondary UNEs because the parties themselves concentrated mostly on the 8db loop. However, since the recurring costs for each are subject to the essentially identical cost adjustment questions, the resolution of the 8db loop applies in equal force to all.

2. Local Switching

There are several points of contention in the local switching cost studies, including switch discounts, demand, treatment of non-recurring costs, feature related hardware and startup. However, a principal contentious issue was the discount applied in the SCIS model. (See Petzinger Direct, pp. 8-20, and compare with Smith Rebuttal, pp. 6-15.) SCIS models the investment cost/loop for digital switches SWBT proposes to use in Oklahoma, specifically Lucent and NorTel. The model input includes the current list price and the effective discount given the SWBT by the switch vendors. The discounts, as reflected in the cost studies, are considerable. However, AT&T claimed the discounts should be more, arguing among other things, that because of the recent PacTel merger and the on going contract negotiations, the discount is likely to be more in the near future. (See Petzinger, p. 10.) SWBT disagreed, pointing out that discount is only one aspect and list price is equally as important. Discounts and prices differ by manufacturer and tend to be customer unique. (See Smith Rebuttal, pp. 6-7.) At this point, such discussions seem speculative and, therefore,

untrustworthy for use in costing, particularly since one would also have to speculate about the future list prices as well (which SWBT points out have historically been increasing). (See Smith Rebuttal, p. 20; Tr., Mar. 11, 1998, pp. 46-47 (Smith).) Since the trend in list price has been upward historically, there is no reason to assume, absolutely, that investment per loop is more likely to decline resulting in overall lower costs, although the ALJ does not discount that as something which could happen in the future. However, for the foregoing reasons, the discount in the current contracts and current list price should be used. This will match two known variables that can be validated and have known parameters. The contract also provides different discounts for initial installations and growth additions. AT&T argued that all the current switches should be "flash cut" and that only the initial discount should apply; SWBT used a mix of growth and initial which better represents the practical basis for switch placement. (See Smith Rebuttal, pp. 8-9 and Lehman Rebuttal, p. 34.) The life cycle approach appears to better represent the nature of the SWBT network that will be unbundled. (See Smith Rebuttal, pp. 7-9.) For this reason, the ALJ concludes that flash cut proposals are not reasonable.

Other disagreements about Getting Started Investment ("GSI") and spare were of interest, but were adequately addressed by the models which all of the parties agreed to use, because such models treat GSI and Spare different than AT&T would suggest by using SCIS. (See Smith Rebuttal, p. 22.) Whether some aspect of this issue should be considered non-traffic sensitive, or not (e.g., Smith Rebuttal, p. 25) or whether spare should be separately accounted for as SWBT proposes, all are part of the Model platform that SWBT has proposed and not strictly an input issue. (See Smith Rebuttal, p. 22, and Issues Matrix S8.) AT&T's 50 percent adjustment also seemed to be speculative. Moreover, with respect to spare, SWBT adequately indicated that its inclusion in its model was separately confirmed by inventory of the central offices involved. (See Smith Rebuttal, p. 22.) The questions concerning GSI were material but, given the stipulation, need not be resolved except to note, as is true elsewhere, the stipulation rates are within the range of costs proposed.

Demand was another debated issue. AT&T suggested that the demand should be "forward looking" by which it meant that current demand should be increased to account for future usage. (See Petzinger, p. 18 and Flappan, p. 64.) SWBT's response was that if higher demand was used, more investment would need to be included (which AT&T did not account for) since investment has demand sensitive attributes. (See, Smith Rebuttal, pp. 6-8, 16 and Deere Rebuttal, p. 33.) Again, the use of increased demand, whether or not appropriate, in this case is speculative and without consistent matching of demand and investment should not be given significant weight.

Again, AT&T's proposal is at best the minimum cost for local switching; SWBT's proposal is at the upper limit of cost, and that cost is probably less if other factors are taken into account, such as the few changes SWBT admits should occur, depreciation and cost of money (which, although agreed to, has not been included in SWBT studies or Cox's initial proposal; such would cause even SWBT's studies to be less overall). Thus a local switch rate less than SWBT's cost proposal is appropriate. I note that SWBT has further agreed that some aspects of its original proposal should be modified to account for some AT&T suggestions. (See Smith Rebuttal, p. 18; Moore Rebuttal, pp. 11-12, 50; and

Conwell Rebuttal, p. 29.) Thus, it seems fairly accurate to conclude that the costs are less than SWBT originally suggested, and therefore (as it was with Loop) are moving towards the rates in the stipulation. The stipulation, once again taking Dr. Collins' testimony into account, is well within the range of costs proposed and is therefore a just and reasonable rate for local switching. Cox witness Dr. Collins, in response to AT&T cross examination, testified that local switching was 30 percent overstated in SWBT's initial cost proposal, but that the stipulation changes were more in line with Cox's opinion on costs. (See Tr., March 11, 1998, p. bwm 21 (Collins).)

3. Transport

Transport is actually a series of cost studies. (See Moore Rebuttal, pp. 22-23.) While several issues were discussed in the testimony, the principal issues appeared to be disputes regarding: (a) circuit counts; (b) fill; and (c) entrance facilities. (See Turner, pp. 7, 16, 30; Moore Rebuttal, p. 21.) Additionally, Mr. Moore agreed that some aspects of the transport studies should be altered to correct certain points. (See, e.g., Moore Rebuttal, pp. 48, 51 (DCS and DSX).) Thus, it is a given that we are beginning the evaluation at a point less than SWBT's original study proposal. Historically, in other Commission cases, it is often true that during the course of hearings, concessions are agreed to, mistakes noted, issue clarified. This does not mean, however, that the entire process must begin again. It is sufficient and reasonable to take those substantive events into account in evaluating the overall rate proposals.

The issue of circuit counts for the interoffice dedicated transport study was raised by AT&T witness Turner. While there are several permeation of this argument, circuit count impacts weightings. (See Moore Rebuttal, pp. 24-25.)

Part of the issue includes whether entrance facilities should be included. This will be discussed later herein, but for purposes of interoffice transport, the ALJ finds that those should not be included in weighting as is true for other circuits, e.g. private line. (See Moore Rebuttal, pp. 26-29.) With regard to message traffic, while there is a dispute whether those were or were not included, it appears that such dispute is not significant and that any changes would have only a minimal impact under any circumstances. (See Moore Rebuttal, pp. 35-36.)

The ALJ further finds that entrance facilities are a separate UNE. (See Moore Rebuttal, pp. 37-39.) These are not interoffice facilities and should have their own cost. Entrance facilities identify the facilities from the CLEC location to the SWBT office and are not on interoffice rings. Interoffice facilities go between SWBT offices. The ALJ concludes that the costs are different and should not be combined. The cost studies should be based upon the UNE as defined in the Interconnection Agreement between SWBT and AT&T.¹⁶

¹⁶ In the course of the hearing, the ALJ took judicial notice of the Interconnection Agreement entered into between SWBT and AT&T, which has been approved by this Commission, and took such Agreement into account in making his findings herein.

Fill factors, as was true in loop fill, are debated on the grounds of actual vs. objective fill. (See Turner, p. 30, and compare with Moore Rebuttal, pp. 42-45.) SWBT claimed the use of actual fill is consistent with TELRIC principles since it reflects reasonable utilization. AT&T disagreed. Objective fill may never be reached and is forward looking only in that it is speculative about what might be achieved. Whether objective fill actually is achieved differs in many engineering cases. (See, e.g., Moore Rebuttal, p. 42.)

The stipulation rate is neither of these two extremes. However, given the concessions by Mr. Moore, SWBT's cost would be lower than proposed and closer to the stipulation rates. Again, Dr. Collins' opinion is relevant and reasonable to support the stipulation on transport. A rate reduction of 30 percent overall from SWBT's original proposal is a just and reasonable rate. AT&T's proposal, at best, is the lowest possible cost and rate, while SWBT's is the opposite extreme, but in any event, it seems clear that the resulting cost is somewhat higher giving ample support for the stipulation rate.

D. LRIC (Non-Recurring Costs)

Non-recurring activities are generally those that are incurred once in ordering or provisioning a UNE. (See Segura, p. 5.) These are basically time multiplied by the labor activity to result in cost algorithms. The testimony and cost studies filed basically identified two broad categories: (a) service order charges; and (b) NRCs for the provisioning of UNEs. In support of its proposals, AT&T offered the testimony of Mr. Segura. SWBT offered the testimony of Ms. Ham, Ms. Smith, Mr. Michalczyk and Ms. Sadlon.

The service order charge issue is principally a disagreement as to the type of activity that will be needed when AT&T places a service order. AT&T assumed that it will place all electronic orders. (See Segura, pp. 14-15.) There is currently an electronic interface for ordering resale services (EASE) and two electronic order delivery vehicles for some UNEs (LEX and EDI). (See Ham Direct, p. 6; Ham Rebuttal, pp. 3-4.) AT&T confirmed that it does not have any electronic interface available to interact with SWBT (or Mr. Segura knew of none). (See Tr., March 12, 1998, pp. rk 147, 159-161, 168.) The assumption, along with the associated estimates of time, flow thru, etc. that Mr. Segura proposed are, at this point, speculative. SWBT identified that manual activity would be needed for all UNE service orders submitted at the present time. National standards groups are meeting to develop others, but none are on line at this point. (See Ham Rebuttal, p. 14; Smith Rebuttal, pp. 50-54.) The actual activity SWBT will perform was documented by Ms. Smith. This difference in input assumptions is significant and while it might be true someday, currently it is not correct that all submissions will be electronic; practically, that cannot be done and may never be done for some elements that are complex. Even for those cases where electronic delivery is not available for UNE by LEX/EDI, AT&T has yet to take advantage of that electronic means, and in fact, has indicated that it does not have plans at any time in the near future to enter the Oklahoma market, if ever. (See Tr., Mar. 12, 1998, pp. rk 147, 159-161, 168, 192 (Segura), and see Cause No. PUD 97-560.) Based upon the current record, the ALJ concludes that manual UNE service order activity is the likely option. If new changes occur, those should be adjusted and recognized in future studies when data is available.

SWBT proposed an electronic delivery rate of \$5.00 to recognize electronic delivery of orders (not ordering), which nevertheless will then require manual activity by SWBT, although somewhat less activity than FAX delivery or similar delivery. (See Smith Rebuttal, pp. 52, 63; Auinbauh Rebuttal, p. 15.) Ms. Smith noted that while there is no specific \$5.00 cost study, based upon her manual service order study, the cost still exceeds the rate proposal. (See Smith Rebuttal, p. 63.) Based upon other current electronic delivery use data for EASE and access service records (ASRs), it also seems more accurate to conclude that the utilization will be far less (e.g., fall out results) for AT&T than Mr. Segura argued should apply. (See Smith Rebuttal, pp. 60-62.) The ALJ finds that the \$5 rate is more than reasonable and just for those circumstances where AT&T uses electronic delivery.

The other NRC activities are also disputed on the above same basis. Mr. Segura, for AT&T, claimed that almost all of the service orders should process through provisioning with little physical intervention by SWBT employees. (See Segura, pp. 5-7.) SWBT noted that such continuity is not achievable and is unrealistic even in its own service standards. Considerable manual activity will be required as is reflected in Mr. Moore's studies. (See, e.g., Michalczyk Rebuttal, pp. 1-6; Sadlon Rebuttal, pp. 1-5; Moore Rebuttal, pp. 17-22.) AT&T's proposal does not represent the activity for the network which SWBT is asked to unbundle. Thus, AT&T's assumptions on DIP/DOP and IDLC, which impact the amount of physical activity, are not representative of the SWBT network. SWBT is not obligated to engage in this quality upgrade. See *Iowa Utilities Commission, supra*.

With respect to these studies, there was a difference in opinion concerning the time estimates for the activities required (given, for the sake of this part, that AT&T disagrees with the extent of the activities, but in some respect agrees for its 2 percent fall out, they will be required). SWBT witnesses who participated in the activities testified on the manner and the means for time estimates. (See, e.g., Michalczyk Rebuttal, pp. 3-6.) For AT&T, Mr. Segura did not participate directly in most estimates, all of which he agreed were national default values produced by others on a national AT&T team. Mr. Segura was unable to answer questions directly about the formulation of these time estimates. (See Tr., March 12, 1998, pp. rk 133-139, 163, 203-205, 212-214, 219-223 (Segura).)

Cox witness Dr. Collins noted that NRCs in the stipulation are 33 percent less than SWBT's proposed rates. This was consistent with Cox's view that the studies should at a minimum be 30 percent less than what SWBT proposed. (See Tr., March 11, 1998, p. bwm-20.) Given that there are some disputes on labor rates and whether those differences should be adjusted in recurring or non-recurring costs, SWBT's proposals are the upper cost limit. Again, AT&T's form the lowest limit for a cost-based determination. The stipulation is reasonable resulting in just and reasonable NRC rates under these cost considerations.

E. Other Matters

There were various other matters in dispute, such as labor rate factors, building factors, depreciation lives, and the common cost allocator. (See, e.g., Rhinehart Testimony, pp. 10, 13, 37, 47.) In some instances, the disputes would have a slight impact on the proposals. (See Conwell Rebuttal, pp. 13-14, 22, 26,

29.) The ALJ has reviewed the testimony on these matters and the facts in the hearing and studies. In some respects, the ALJ concludes that the disputes are moot by the reduction in agreed rates which lowers the cost ceiling proposed by SWBT by 33 percent. In other instances, the ALJ concludes that AT&T's suggestions, e.g., common cost, are speculative. The matter of depreciation lives is of relevance and material but given the ranges, is amply addressed within the stipulation results which reduce recurring costs (where the cap cost is applied) considerably. Dr. Collins, on behalf of Cox, made particular references to common cost, capital cost and other factors in his direct testimony in arguing that SWBT's costs were overstated. His review of the stipulated rates assured himself that the rates reflect reasonable adjustments to costs as he recommended, albeit not perfect, and are cost-based. (See Tr., March 11, 1998, pp. bwm 8, 16 (Collins).) The ALJ concurs with Cox.

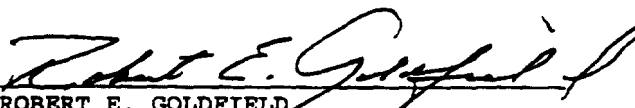
Furthermore, SWBT witness Cooper filed embedded studies for the principal elements of loop, local switching and transport. In keeping with the obligation for just and reasonable rates while permitting "reasonable profit," SWBT argued that these embedded rates represent the more likely actual cost that it will incur in providing service and UNEs in Oklahoma. Traditionally, the Commission's obligation has been to permit a utility the opportunity to achieve its revenue requirement and attract capital. See, e.g., *Southwestern Bell Tel. Co. v. State*, 825 P.2d 262 (Okla. 1992). In reviewing the stipulation rates with the embedded costs, together with the requirement in Section 252 of the Act that cost-based rates may include reasonable profit, the ALJ concludes that the stipulated rates meet these obligations; are cost-based and will enable SWBT a reasonable opportunity for recovery of capital in a competitive market at reasonable profit and more importantly, will allow Cox and other CLECs in Oklahoma to effectively compete against SWBT in the Oklahoma marketplace.

Given the lengthy discussion above, the ALJ will not devote any additional discussion to PUD 97-442, but would note that the same principles discussed above with respect to PUD 97-213 support the Commission's adoption of the Staff's PUD 97-442 stipulation *in toto*.

In summary, the ALJ finds that the stipulation reached between Cox and the Staff in PUD 97-213 and the stipulation proposed by Staff in PUD 97-442, and the rates contained in those stipulations, are lawful, fair and reasonable, are amply supported by competent and substantial evidence in the record and therefore recommends that the Commission adopt and approve such stipulations *in toto*.

IT IS THEREFORE THE RECOMMENDATION OF THE ADMINISTRATIVE LAW JUDGE that the above-entitled findings of fact and conclusions of law be the order of the Commission.

Dated this 30th day of June, 1998.


ROBERT E. GOLDFIELD
Administrative Law Judge